

## INVITED COMMENTARY

### ALCOHOL IN RUSSIA

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**Abstract** — The contribution that alcohol has made to the large fluctuations in mortality in Russia in recent years is now widely recognized. An association between heavy drinking and Russia is part of popular culture. But what is the reality? This paper reviews the evidence on historical patterns of consumption in Russia, highlighting the difficulties of obtaining valid statistics during the Soviet period (1917–1991). It notes how the state, at various times, encouraged alcohol sales. By the early 1980s, the social cost of heavy drinking was becoming apparent. This led, in 1985, to the imposition of the wide-ranging and initially highly effective anti-alcohol campaign by Mikhail Gorbachev. The features of this campaign and of its subsequent collapse are described. In the 1990s, consumption of alcohol increased rapidly. There has, however, been a recent reduction in alcohol-related deaths. It is concluded that heavy drinking is not an inevitable feature of Russian life and that, as the state has done much to create the present problem, it also has a role to play in resolving it.

#### INTRODUCTION

There is now compelling evidence that alcohol has been a major factor in recent widespread changes in mortality in Russia and in other countries of the former Soviet Union. In 1985, Mikhail Gorbachev, the newly appointed General Secretary of the Communist Party of the Soviet Union, instituted a large-scale anti-alcohol campaign. Within a few years, as the Soviet Union was collapsing, the campaign faltered and eventually gave way to a rapid rise in consumption, fuelled by widespread illicit production, on a massive scale. These changes were accompanied by large fluctuations in mortality. Between 1985 and 1986, male life expectancy at birth increased by 2 years and between 1992 and 1993 it fell by 3 years. The change in life expectancy was due, almost entirely, to differences in mortality among the young and middle aged (Leon *et al.*, 1997). Changes on this scale are unprecedented anywhere in the world in peacetime (Ryan, 1995).

We have previously shown that these changes were real rather than due to data artefact, and that alcohol has played a major role, with the largest relative fluctuations from alcohol-related deaths, injuries and cardiovascular diseases, while

mortality from cancers remained stable (Leon *et al.*, 1997).

Subsequently we have also shown how alcohol has contributed to the regional diversity in the decline in life expectancy in the early 1990s (Walberg *et al.*, 1998) and to the socio-economic differentials in Russian mortality (Chenet *et al.*, 1998a). An early challenge was to explain the apparent association between drinking and increased death rates from cardiovascular disease, which is contrary to the view prevailing in the West where alcohol, at least in moderate amounts, is seen as cardio-protective (Renaud *et al.*, 1993). It was clear that traditional risk factors could not explain the observation that deaths from cardiovascular disease in Moscow increase significantly at weekends when binge drinking is most likely to occur (Chenet *et al.*, 1998b). Subsequently we have shown that binge drinking has effects on the heart which are entirely different to those seen with regular moderate consumption (McKee and Britton, 1998) and that the pattern in Russia leads to a greatly increased risk of sudden cardiac death (Britton *et al.*, 1998).

Collectively, this evidence demonstrates the importance of alcohol in explaining the Russian mortality crisis of the 1980s and 1990s. It is against such a background that this commentary overviews

the pattern of drinking in Russia and how it has changed in recent years. It draws on a variety of sources, in particular a review of the anti-alcohol campaign by White (1996) and a series of studies of drinking in Russia edited by Simpura and Levin (1997).

### HISTORICAL PATTERNS OF CONSUMPTION

Alcohol, as a central component of life in Russia, has been commented on, by Russians and by travellers from other countries, since at least the tenth century AD. There are many accounts of the very high prevalence of drinking to the point of unconsciousness by both men and women, of all social strata, to a level that amazed writers from other European countries. By the nineteenth century, however, when statistics with at least some degree of validity became available, the level of alcohol consumption was actually lower than in many other countries. It has, however, been argued that as Jews and 'old believers' drank little, those who did drink consumed quantities that were comparable with, for example, France. What differed was the nature of that consumption. Nearly 90% of all alcohol was in the form of spirits (vodka), a much higher figure than in other countries, and drinking typically was undertaken in binges rather than the manner of consumption in, for example, Mediterranean countries, in which wine was drunk each day with meals.

Widespread and excessive alcohol consumption was tolerated, or even encouraged, because of its scope for raising revenue. From the 1540s, Ivan IV began to establish *kabaks* (where spirits were produced and sold) in all major towns, with revenues going directly to the royal treasury. These gained monopoly status in 1649 and continued, through periods in which they were effectively franchised to local merchants, until the revolution. By the early twentieth century, income from alcohol constituted at least a third of all government revenue. It has also been argued, especially by Marxist historians, that heavy consumption of alcohol was also used as a means of reducing political dissent (White, 1996).

The first Bolshevik government reduced alcohol production (Sheregi, 1986) but by about 1921 consumption had returned to very high levels, in particular spirits distilled illicitly. By 1925, all the

restrictions imposed after the revolution were rescinded, after which alcohol-related deaths exceeded their pre-war level, in some cities, such as Moscow, by as much as 15-fold. This decision, together with that to re-establish a state monopoly, was taken, quite explicitly, by Stalin, to raise money and thus avoid the necessity of seeking foreign investment capital. By the 1970s, receipts from alcohol were again constituting a third of government revenues.

Valid information on levels of consumption is difficult to obtain due to the climate of official secrecy during the Soviet period (Simpura and Levin, 1997; Treml, 1997). From 1963, figures for sales of alcoholic beverages from state outlets were combined in an 'other foodstuffs' category, with products such as ice cream, coffee, mushrooms, and spices, thus instantly becoming the largest single category of foodstuff. Other statistics on trade and production slowly disappeared over the following decade. At no time were figures for illegally produced alcohol, or *samogon*, reported, even though, according to some researchers, this may have accounted for 50% of total consumption. The few examples of family expenditure surveys conducted before the 1980s produced figures for alcohol consumption that are widely disbelieved as they equate to figures substantially lower than even official production levels.

Potentially more reliable figures have been generated outside the USSR by, for example, surveys of emigrants, especially to Israel, although these are problematic as there is evidence that Soviet Jews drank rather less than their Slavic neighbours. Nonetheless, one of the most rigorous studies, although again likely to be an underestimate because it did not include that large volume of alcohol now known to be stolen each year, suggests that consumption more than doubled between 1955 and 1979 to 15.2 litres per person (Treml, 1975). This figure is higher than that recorded for any OECD country (France was highest at 12.7 litres in 1990, although most other countries were in the range 5–9 litres), where data are largely derived from validated surveys of consumption (World Drink Trends, 1992). Of course, this figure relates to the entire USSR and, for religious and other reasons, there are marked regional variations so levels in the Russian heartland are likely to have been much higher. Other studies of emigré families suggested that alcohol consumption accounted for 15–20% of

disposable household incomes. Studies by dissidents and others supported the impression that alcohol consumption was increasing at alarming levels, suggesting, for example, that alcohol accounted for 15% of total retail trade (Krasikov, 1981).

Under Gorbachev, official statistics on a wide variety of topics slowly reappeared, although it was still not possible to undertake or publish research on topics such as alcoholism and social breakdown (Korolenko *et al.*, 1994). The available data included figures on official production of absolute alcohol equivalent which was reported to have increased from 2.2 litres *per capita* in 1940 to 7.2 in 1985, a rather greater increase than had been assumed in the earlier estimates by Western observers.

However, the level of consumption is only one part of the picture. It is also important to know whether the frequency of drinking and the social context within which it takes place are different from those in other countries. Here, the information is even more fragmentary. Various reports suggest that, by the 1980s, the age at which people began to drink had fallen, that increasing numbers of women and children were heavy drinkers, and in some cities the average consumption among working adults was a bottle of vodka each day (White, 1996).

This pattern is reflected in the extensive evidence, reviewed by White (1996), from newspapers and from local surveys that alcohol consumption was becoming a major social problem. This included reports from a chemical plant that 3.5% of the workforce were confirmed alcoholics, 2.2% showed early signs of addiction, and a further 18.8% were alcohol 'abusers', with only 1.4% abstainers. Between 75% and 90% of absences from work were attributed to alcohol. It was suggested that loss of productivity associated with alcohol was the main reason for the failure to achieve the Soviet Union's 5-year plan in the early 1980s, with estimates that the loss of productivity due to alcohol was up to 20%. There were many letters to newspapers complaining of a lack of government action to tackle excessive consumption.

In summary, despite the absence of definitive information on patterns of alcohol use in Russia before 1985, there is considerable evidence from many sources that alcohol was producing wide-ranging and substantial social problems. Furthermore, the commonest type of alcohol consumed was vodka and it appears that much drinking was in

binges. Consequently, there was substantial scope for reduction when the campaign began in 1985.

#### POLICY ON ALCOHOL IN THE 1980s

Although there had been a series of campaigns against alcoholism under Brezhnev, there was little evidence that they had much effect. Indeed, Brezhnev was known to be a very heavy drinker. After 1982, action was initiated under Andropov and Chernenko under the general heading of reducing anti-social behaviour. In a speech in 1984, Chernenko finally focused national attention on the problems of alcohol abuse, encouraging more rigorous enforcement of existing legislation. An anti-alcohol movement was already emerging in the early 1980s and, supported by the message from Chernenko, there was some evidence that both alcohol consumption and alcohol-related crimes were falling by 1984. In early 1985, Gorbachev succeeded Chernenko, who is believed to have died from cirrhosis. The campaign, although identified by many commentators with Mikhail Gorbachev, is now thought to have owed rather more to others. His wife, Raisa, who had direct experience of the effects of alcoholism in her family, may have played a major part, but the prime movers are now known to have been two members of the Politburo, Yegor Ligachev and Michael Solomentsev (White, 1996; Service, 1997). They were able to gain acceptance of the policy despite opposition from many other senior politicians. Gorbachev has also suggested that his daughter, Irina Mikhailovna Virginskaya who is a medical doctor, played an important role in convincing him (Gorbachev, 1996).

Gorbachev launched the anti-alcohol campaign in May 1985 (Ivanets and Lukomskaya, 1990; Tarchys, 1993; White, 1996). All organs of the state were exhorted to develop strategies to reduce alcohol consumption. One of the most visible manifestations of this, to foreigners, was that alcohol was banned at official functions, but also party officials and managers who drank heavily were to be dismissed, outlets were to be reduced radically, and many other actions were to be taken by, for example, trade unions and the media. In particular, an attempt to mobilize society in the campaign for temperance led to the creation of the All-Union Voluntary Society for the Struggle

for Sobriety in September 1985. This society claimed 12 million members after 1 year.

Several points about the campaign should be noted. The May launch was an advance announcement of future action. The first rules restricting access to alcohol came into effect on 1 June 1985. These were important, as they included a series of actions that could be enforced at once and where the impact of enforcement was highly visible, such as banning drinking of alcohol at all workplaces, including formerly legal bars, such as those in higher education establishments; banning sales before 2 p.m.; restricting alcohol sales to off-licences; and banning sales on trains (including dining-cars) and similar establishments.

In August 1985 prices increased by 25%, with another increase in August 1986. Subsequently there was a series of further measures to restrict access, with cuts in production leading to massive shortages.

The consequences of these changes were immediately apparent, such as the evidence of long queues at official alcohol outlets (up to 3000 people in one case in Moscow), but to assess whether alcohol consumption really fell, it is necessary to ask whether there is any evidence of a corresponding change in other related measures. Obviously, official statistics must be treated with some caution, not least because it is likely that some officials may have felt it necessary to forward data suggesting that they were achieving better results than was actually the case. With this caveat, official figures indicated a fall of a third in production of spirits. There is, however, extensive supporting evidence from other sectors. There were recorded falls of similar magnitude in road traffic accidents and absenteeism from work. Several surveys indicated that about 10% of people had given up drinking and about a third were drinking less. There were also many press reports suggesting that, in some areas, there had been dramatic reductions in consumption, although there were other reports of areas where little had changed, and there was evidence that many members of the All-Union Voluntary Society for the Struggle for Sobriety had a rather liberal interpretation of abstinence (an analogy was drawn with the Lifesaving Association, membership of which was almost universal in some areas although typically half of its members could not swim). But perhaps the most convincing evidence of its effectiveness was what ultimately led to its demise, its impact on public finances. The figures

published at that time for spending on alcohol from official outlets fell in 1985 by 5 billion roubles from that in 1984 (note that the campaign only began in May 1985, so this is consistent with other evidence that consumption was falling before the campaign began), but by 1986 it had fallen further, by 15.8 billion roubles and by 1987 by a further 16.3 billion. The consequences for government revenues, together with the loss of power by Ligachev and Solomentsev, who had played an important part in the genesis of the campaign, are thought to have played a major part in its abandonment in 1988.

The effect of the campaign was short-lived, because of the rapid substitution of illicit production. A number of factors worked in parallel to encourage increased illegal production and trade. One was a visible loosening of restrictions in society generally ('glasnost') which led people to be less fearful about minor lawbreaking, reflected in declining prosecution for violating anti-alcohol laws. Many of these were for driving while intoxicated, but most were for home-brewing without intent to sell. From the inception of the campaign, first-time convictions for home-brewing generally led to a light fine or a warning, but in June 1987 this was made a non-criminal offence.

Direct evidence on illicit production is less easy to obtain. As noted earlier, official data from Goskomstat in the 1980s used methods that were classified at the time as 'state secrets' but are now known to have used the simple method of assuming that all sugar consumed in excess of 24 kg per person per year went into samogon, and that 75% of samogon came from sugar. This method broke down and was abandoned after 1988 during an acute sugar shortage. Nemstov (1992) has constructed a series of estimates of overall consumption that are thought likely to reflect at least the true situation. His estimates are based on the proportion of those dying from violence (accidents, suicides, murders) who were found to be intoxicated at the time of death. This is assumed to be closely (and linearly) correlated with actual alcohol consumption *per capita*. The data on which this is based were acquired from surveys of oblast (regional) health authorities in 1991, and again in 1994. After a complex series of deductions and assumptions, the resulting figures are anchored to alcohol consumption *per capita*, as the relationship is known with a reported high level of certainty for Moscow

for 1984 and 1986. There appears to have been a short-term absolute decrease in consumption in 1985, but the level began to recover within a year and had returned to previous levels by the early 1990s. Nemtsov's data are more consistent with other evidence than are the official Goskomstat figures, as they show alcohol consumption already falling in 1984.

Further supportive evidence of the weakening of the campaign comes from data on crimes committed while intoxicated. These show that the percentage of those sentenced for crimes while intoxicated was steadily rising.

There is a wealth of other supporting evidence, reviewed by White (1996), on illicit production, ranging from information on sales of sugar, yeast, and alcohol substitutes such as window-cleaning fluids, to seizures of stills or illicit alcohol, and even reports of theft of alcohol from the de-icing systems of aircraft. Of great importance was the impetus that this dramatic increase in illicit production had for long-term consumption trends. Prior to 1985, most illicit production had taken place in rural areas, where it was frequently used as a form of unofficial currency for use in the informal economy. The 1985 campaign led to a dramatic extension of production into non-traditional settings, ranging from apartments in the industrial cities of the Urals to schools and even long-distance trains.

#### CURRENT LEVELS OF CONSUMPTION

By the 1990s, there was some evidence that alcohol consumption exceeded the level prior to 1985. The vast expansion of illicit production in the late 1980s has made official production figures even less valid but there is now emerging evidence from household surveys of the scale of alcohol consumption.

The Russian Longitudinal Monitoring Survey, undertaken regularly since 1992, contains data on between 10 and 12 thousand people (Zohoori, 1996). In the round undertaken in 1995, 70–80% of males aged 20–55 years and 50–60% of females aged 20–50 years drank regularly, with 5–10% in all age groups drinking the equivalent of over 100 g per day. It seems reasonable to assume that some of those who drank most heavily were less likely to be included in the survey, so these figures may have been underestimates.

Further data are available from the Russian Barometer survey, undertaken by the Russian Centre for Public Opinion Research between 25 July and 2 August 1996 (Rose, 1996). This was a multi-stage stratified sample of the Russian Federation. We have used these data to examine the determinants of consumption in Russia and, importantly, to highlight the problems of using aggregate data (Bobak *et al.*, 1999). Nine per cent of men and 35% of women reported not drinking alcohol at all. Only 10% of men and 2% of women reported drinking several times per week, but 31% of men and 3% of women would drink at least 25 cl of vodka at one go at least once a month, and 11% of men and 1% of women would drink at least 50 cl of vodka in one session at least once per month. There were large geographical differences, with lowest rates of heavy drinking in the Volga and Caucasus regions and highest in the Urals. Among men, the unmarried drank more than the married, and the widowed drank less. Unemployment was strongly associated with heavy drinking. These findings were consistent with our work on gender and socio-economic differences in alcohol-related death in Russia (Chenet *et al.*, 1998a).

#### GENERAL CONCLUSIONS AND COMMENTS

Heavy drinking has a long tradition in Russia. This has led many commentators to argue that it is so ingrained as to be impossible to tackle. Certainly, the pattern of drinking observed in Russia is common to many societies in the far north, such as the Finns and the North American Inuit. However, as the historical evidence reveals, to a considerable extent this culture has been created by successive governments, whether Czarist or Communist. Furthermore, there are considerable variations in the drinking culture within Russia, whether considered in terms of geography, gender, or socio-economic strata, with significant numbers of abstainers among some groups. These findings, together with the large fluctuations in alcohol-related mortality in the 1980s and 1990s, suggest that heavy drinking is not an inevitable feature of being Russian. The history of alcohol consumption in Russia shows that, at various times, the state has contributed substantially to the problem, through the production and distribution of cheap alcohol. Theoretically, it should also be possible for the government to take appropriate action.

In the space available it is not possible to explore the reasons for the failure to develop an effective policy response. Elsewhere, we have examined the inability to mount an effective response to the high level of alcohol-related problems in Hungary and many of the same reasons apply to Russia (Varvasovszky and McKee, 1998). It is, however, important to note that these reasons, including corruption and lack of technical and policy-making capacity, lack of ownership of policies, and absence of the levers necessary to co-ordinate the required inter-sectoral action are not confined to policy on alcohol and have implications for health policy more generally (ECOHST, 1998).

Fortunately, by the end of 1995, alcohol-related mortality was beginning to decline once more (McKee *et al.*, 1998), possibly due to an increase in the relative price of alcohol coupled with reduced access to sales outlets (Simpura and Levin, 1997), although evidence of the effects of the economic crisis in the summer of 1998 are not yet available. Notwithstanding this favourable trend, there is clearly an urgent need to put in place the structures that would permit a co-ordinated policy response to the situation in which a considerable number of Russians frequently drink up to half a bottle of vodka at a time.

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